Claims

1. Process for producing a cylindrical component of glass, comprising

feeding a glass composition to a heating zone,

softening the glass composition in the heating zone,

continuously plastically deforming the softened glass composition in a deformation zone to form a component, the deformation zone having a circumference,

determining a deviation of the determined cross-sectional geometry from a nominal geometry of the component, and

locally heating or cooling the composition in at least one deformation area, which extends over only a part of the circumference of the deformation zone, as a function of the deviation of the cross-sectional geometry from the nominal geometry.

2. Process as in claim 1, wherein the deformation area is locally cooled by directing a stream of gas against the composition.

3. Process as in claim 1, wherein the deformation area is locally heated by means of one of electric heating elements, flame, and a laser beam.

4. Process as in claim 1, wherein said deformation area is locally cooled by means of heat shields.

5. Process as in claim 1, wherein the composition is locally heated or cooled in two opposed deformation areas.

6. Process as in claim 1, further comprising

determining a change in the cross-sectional geometry of said component over time,

and

shifting at least one said deformation area around the circumference of said deformation zone as a function of the determined change over time in the cross-sectional geometry of the component.

7. Process as in claim 1, wherein determining said deviation comprises determining a size and location of a deviation of the cross-sectional geometry from a nominal geometry of the component, and locally heating or cooling is performed automatically as a function of the size and location of the deviation.

8. Process as in claim 7, wherein said component has a circular or annular cross-section with an outside diameter, the cross-sectional geometry is determined by measuring said outside diameter to determine maximum and minimum values, a size value and a location value of the deviation are determined from the maximum and minimum measurement values, quantitative heating or cooling is performed as a function of the size value, and the deformation area is positioned as a function of the location value.

9. Process as in claim 1, wherein the softened glass composition is deformed by drawing said composition in said drawing direction so that said composition tapers in the drawing direction toward the component.

10. Apparatus for producing a cylindrical component of glass, said apparatus comprising a feed device, a heating device, and a take-off device, where the glass composition is fed continuously by the feed device to the heating device, in which it is softened, and where the component is formed out of the softened glass composition by means of the take-off device in a deformation zone, further comprising heating and/or cooling means (4; 19) which act locally on at least one

deformation area (18; 18a), which extends over only part of the circumference of the deformation zone (14).

11. Apparatus according to Claim 10, wherein the cooling means (4; 19) comprise a gas nozzle (5; 20).

12. Apparatus according to Claim 10, wherein the heating means comprise ~~an electrical heating element~~, a burner, ~~or a laser.~~

13. Apparatus according to Claim 10, wherein the cooling means comprises a heat shield.

14. Apparatus according to Claim 10, wherein the heating and/or cooling means comprise pairs of opposing elements.

15. Apparatus according to Claim 14, wherein the cooling means (4; 19) comprise two nozzles (5; 20) arranged opposite each other.

16. Apparatus according to Claim 10, wherein the cooling means have a nozzle ring (19), arranged around the circumference of the deformation zone (14), the ring comprising individual nozzles (20) which are fed with gas independently.

17. Apparatus according to claim 10, wherein the heating and/or cooling means (4; 19) are arranged inside the heating device (1).

18. Apparatus according to Claim 10, wherein the heating and/or cooling means (4; 19) can be moved in the direction of the longitudinal axis of the component (12) and can be shifted in the circumferential direction around the deformation zone (14).

19. Apparatus according to Claim 18, wherein the heating and/or cooling means (4; 19) are connected to an automatic control device (9), and, as a function of a control signal from the control device (9), these means can be moved in the direction of the longitudinal axis of the

component (12) and adjusted in the circumferential direction around the deformation zone (4).